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The invention relates to the biochemical processes for treatment of sewage, containing organic substances, and may be used in the processing and food industries.

The process for anaerobic treatment of sewage, according to the invention, includes the continuous treatment thereof in mesophilic conditions of methanoic fermentation with fixed microflora, selective removal of the carbon dioxide from the extracted sewage gas by interaction thereof with mono- and/or diethanol amine, periodical regeneration of ethanolamine carbonic compounds by heating up to 100…105°C with recirculation of the extracted carbon dioxide through the treated water and with utilization of the emitted heat for sewage heating up to 30…35°C.

The device for realization of the claimed process contains a cylindrical body, wherein there is placed a volumetric fill for microflora fixation, a central pipe for sewage supply, provided with a mixing system, placed in the lower part of the pipe, pipes for outlet of the treated water and of the sewage gas, a pipe for carbon dioxide supply, an inlet pipe-line, coupled by means of some controlled rectifiers with two ethanolamine adsorbers equipped with heat exchangers, heaters and bubblers and coupled by means of a pipe-line with central pipe, the ethanolamine adsorbers are coupled by pipe-branches and controlled rectifiers with the pipe for outlet of the sewage gas, with a transducer of the sewage gas content and with the pipe for carbon dioxide supply, the heaters are coupled by pipe-branches and controlled rectifiers with a heat source, each of the controlled rectifiers and the transducer of the sewage gas content being coupled by a signal amplifier with a control unit.

The result of the invention consists in enhancing the degree of anaerobic sewage treatment and in increasing the qualitative indexes of the obtained sewage gas.

Claims: 2
Fig.: 1